

Notice of Allowability

Application No.

09/762,243

Examiner

Anne R. Kubelik

Applicant(s)

KAPULNIK ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 5/23/05.
2. ☒ The allowed claim(s) is/are 61 and 62.
3. ☒ The drawings filed on 06 January 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sol Sheinbein on 21 June 2005.

IN THE CLAIMS:

61. (Currently amended) A method of generating a plant having a modified canopy size, ~~comprising~~ wherein the method comprises:

(a) transforming plants with a construct that expresses ~~expressing streptavidin~~ in cells of a young leaf and/or shoot tissue ~~of a plurality of plants, said streptavidin~~ operably linked to ~~including~~ a signal peptide capable of self secretion, thereby depleting biotin in said cells of said young leaf and/or shoot tissue; and

(b) selecting viable plants ~~of said plurality of plants~~ which exhibit degeneration of said young leaf and/or shoot tissue as compared to similar plants not expressing said streptavidin, thereby obtaining the plant having ~~the~~ modified canopy size..

62. (Currently amended) A method of generating a plant having a seedless fruit, ~~comprising~~ wherein the method comprises:

Art Unit: 1638

(a) transforming plants with a construct that expresses ~~expressing~~ streptavidin ~~regulated~~ under the transcriptional control of a Tob promoter in cells of an embryonic tissue ~~of a plurality of plants~~, said streptavidin operably linked to including a signal peptide capable of self secretion, thereby depleting biotin in said cells of said embryonic tissue; and

(b) selecting viable plants ~~of said plurality of plants~~ which exhibit degeneration of said embryonic tissue as compared to similar plants not expressing said streptavidin, thereby obtaining the a plant having the seedless fruit.

IN THE ABSTRACT:

The inventions are methods of generating a plant having modified canopy size or having seedless fruit by transformation with a construct encoding streptavidin operably linked to a secretion signal peptide capable and selecting plants with degeneration of young leaf and/or shoot tissue or degeneration of embryonic tissue, respectively.

~~A method of effecting degeneration of a somatic plant tissue of a plant by expressing in cells of the somatic plant tissue a heterologous protein capable of binding a plant essential factor wherein expressing the heterologous protein is effected in a fashion so as to lend to depletion of the essential factor such that plant viability is maintained, while at the same time, degeneration of the somatic plant tissue is effected.~~

IN THE TITLE:

Art Unit: 1638

METHODS FOR PRODUCING PLANTS HAVING MODIFIED CANOPY SIZE OR
SEEDLESS FRUIT SELECTIVE AND OPTIONALLY REVERSIBLE DEGENERATION OF
SOMATIC PLANT TISSUE

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

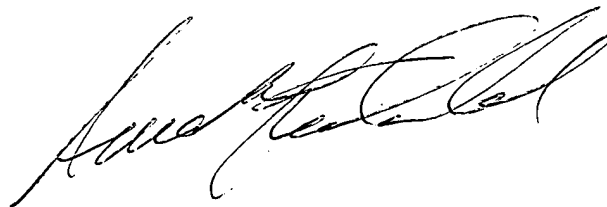
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The central fax number for official correspondence is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Anne R. Kubelik, Ph.D.
June 21, 2005



**ANNE KUBELIK, PH.D.
PRIMARY EXAMINER**